MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

September 8, 2009

Mr. Femi Akindele
Remedial Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
Region IV
61 Forsyth Street
Atlanta, GA 30303

Re: Result of Air Quality Monitoring - FY 10, First Quarter (FY10-4Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele:

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560.

1. URS Corporation letters dated June 20, 2009, 2 pages.

2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1page.

3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 30, 2010, 1 page.

4. Table 2, On-Site Meteorological Data, Sampling date, April 30, 2010, 1 page.

5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 30, 2010, 1 page.

6. Figure 2. Graphic Display for Gas Monitoring Well Samples for Methane.

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
I&FP Supervisor

RHW/rw
Lees-10-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Ms. Cheryl Brown Harris, Division of Waste Management
H. J. Schardein, Executive Director
Michael Griffith
Lees Lane File

URS

31825450.00008

June 20, 2010

Mr. Rick Watkins
Louisville Metropolitan Sewer District
3050 Commerce Center Place
Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on April 30, 2010 (Quarter 47). Six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Benzene, methylene chloride, toluene, vinyl chloride, and xylenes were detected in small quantities (at or below the analytical detection limits) in the ambient samples. Methane concentrations were at or near typical ambient air data and are consistent with historical data for the site.

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate throughout the sampling day; fair (60-80 ^{O} F), with moderate variable winds. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 7-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total non-methane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.

The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The April 30, 2010 field blank canister reported no positive hits other than the surrogate recoveries. The reported results have not been blank corrected in attached tables per our standard project procedure.

URS Corporation
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
Telephone: 919.461.1100
Fax: 919.461.1415

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The only well sample with positive hits above the analytical detection limit was Well G-1. The four primary analytes were detected just above the detection limit. Methane concentration for Well G-1 was elevated (103 ppm) during the sampling period. Following field sample collection, Well G-1 was sampled with a GA-90 analyzer to test for the presence of methane in the well. Methane was not detected in Well G-1 or the vicinity of the well above background by the instrumentation indicating that methane concentration had dissipated during the canister sampling period of approximately 2 hours.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

Robert F. Jongleux
Project Manager

Enclosure

cc: Chris Davis, URS/LOU
Project File/Task 47

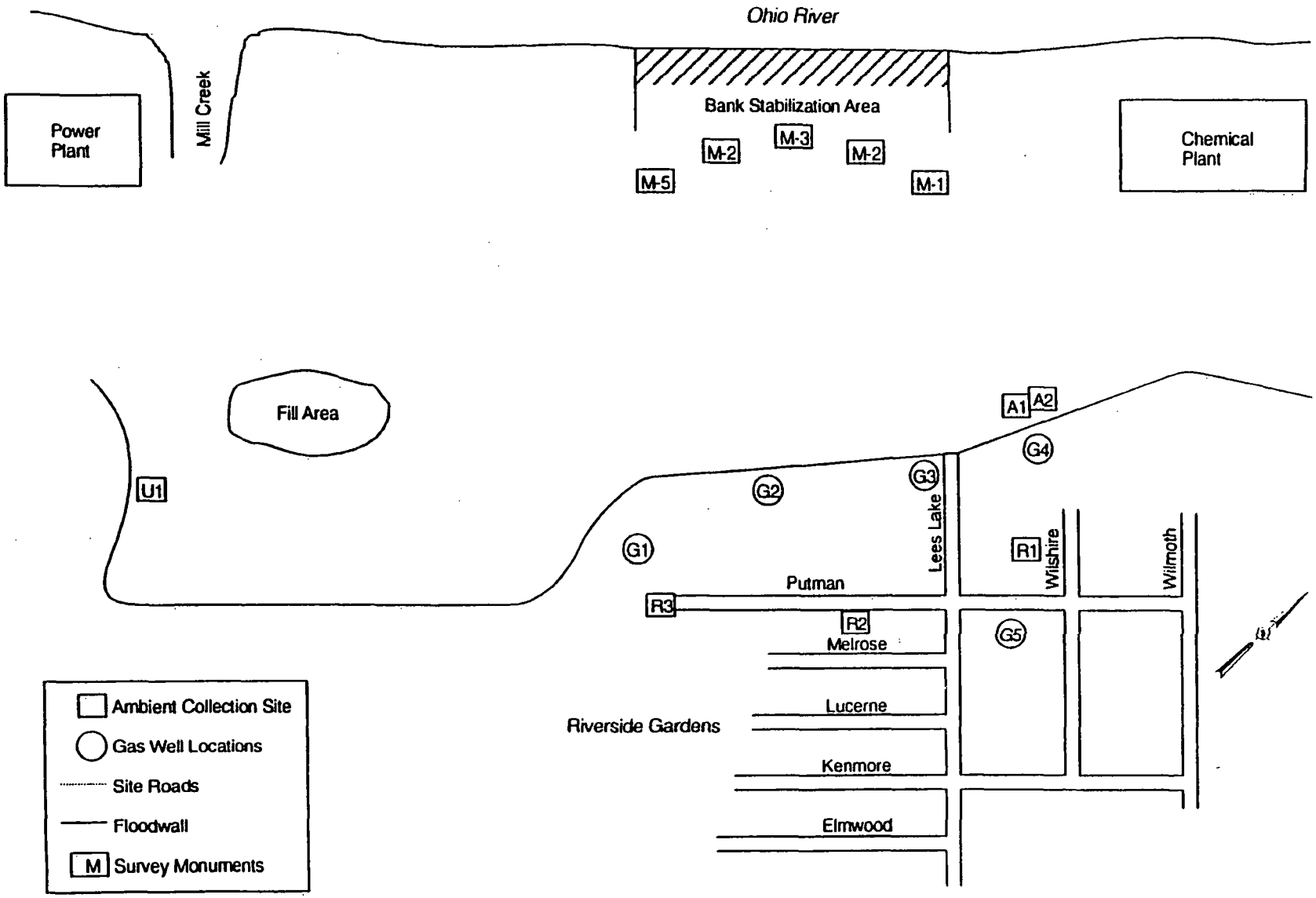


Figure 1. Lees Lane Landfill Sampling Locations

URS

TABLE 1

TO-15 DATA SUMMARY FOR AMBIENT
AIR SAMPLES AT THE LEE'S LANE LANDFILL
SAMPLING DATE: 30 APRIL 2010

	Ambient Air Samples					
Sample ID	A1	A2	U1	R1	R2	R3
Canister ID	5464	RA0898	1015	RA2030	RA2116	RA2036
Dilution Factor	4.896	5.430	5.883	4.506	6.245	5.632
Location	ONSITE	ONSITE DUP.	LG&E	4423 WILSHIRE	PUTNAM LANE	PUTNAM END
Veriflow ID	A181861	A168513	A218997	A134120	A218796	A181856
Compound (ppbV)						
Benzene	0.0353	0.0521	ND	0.073	0.0525	ND
Methylene chloride	ND	ND	ND	0.0415	ND	ND
Toluene	0.0715	0.117	0.117	0.19	0.0974	0.0693
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	< 0.979	< 1.09	< 1.18	< 0.901	< 1.25	< 1.13
Methane (ppmV)	4.61	4.86	4.53	4.06	5.04	4.38

ND = Non Detect

TABLE 2

LOCAL METEOROLOGICAL DATA
AMBIENT AIR SAMPLES
SAMPLING DATE: 30 APRIL 2010

Time	Barometric Pressure (in Hg)	Temperature (°F)	Dewpoint (°F)	Wind Direction (from)	Wind Speed (mph)	Observation
7:53 AM	29.84R	62.1	51.1	SSE	3.5	CLEAR
8:53 AM	29.85R	66.0	52.0	SSE	10.4	CLEAR
9:53 AM	29.85	69.1	51.1	S	10.4	CLEAR
10:53 AM	29.83F	72.0	52.0	S	12.7	CLEAR
11:53 AM	29.83	75.0	51.1	S	12.7	SCT CLOUDS
12:53 PM	29.81F	78.1	51.1	S	10.4	CLEAR
1:53 PM	29.79F	79.0	50.0	S	11.5	CLOUDY
2:53 PM	29.78F	81.0	54.0	SW	11.5	SCT CLOUDS
3:53 PM	29.76F	82.0	54.0	S	11.5	CLEAR
4:53 PM	29.75F	82.0	53.1	SSW	16.1	CLEAR
5:53 PM	29.73F	82.0	54.0	S	17.3	CLEAR

Source: National Weather Service, Louisville, KY

URS

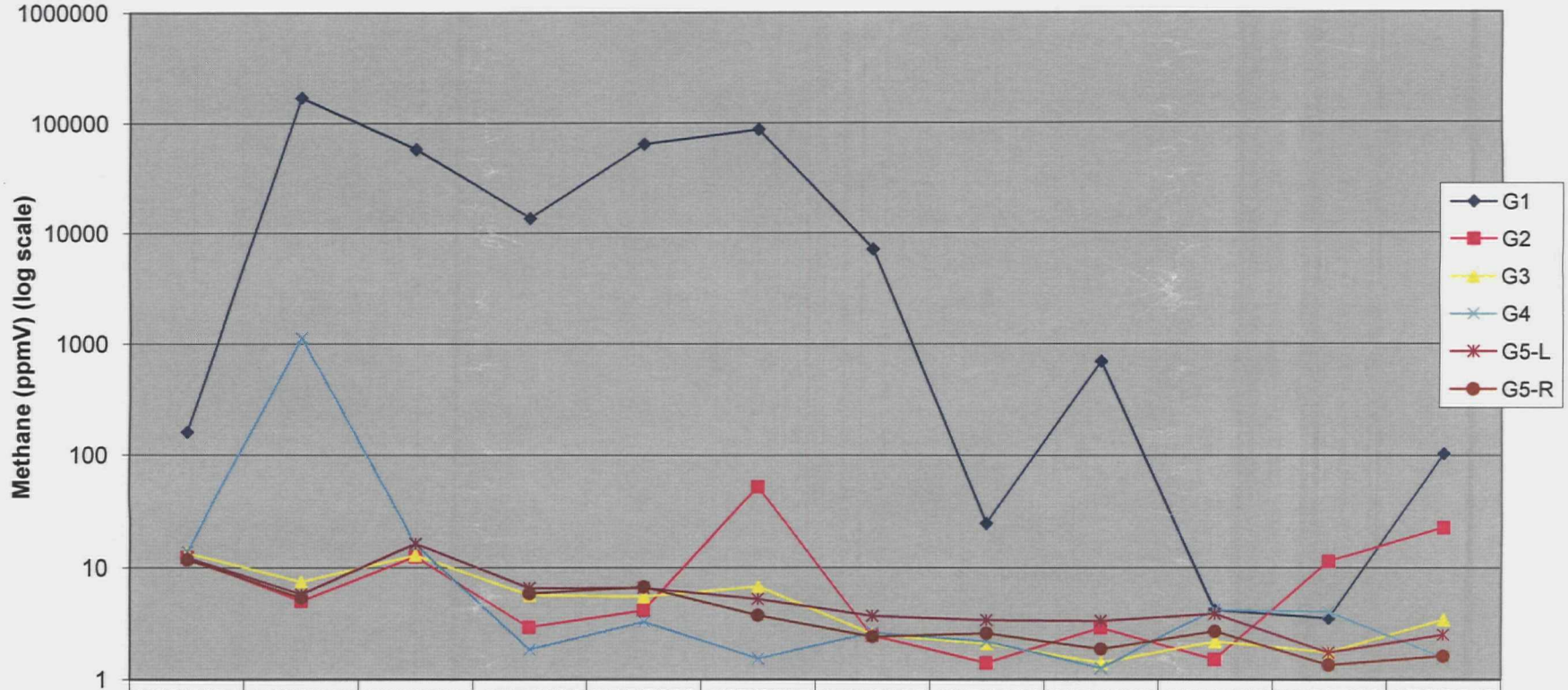
TABLE 3

TO-15 DATA SUMMARY FOR GAS MONITORING
SAMPLING DATE: 30 APRIL 2010

	Well Samples						
	G1	G2	G3	G4	G5-L	G5-R	BLANK #1
Canister ID	RA2029	RA2035	RA2028	RA2032	5412	RA2115	RA0893
Dilution Factor	4.3514	4.4212	4.3376	4.4908	4.2622	4.2818	2
Orifice	RA2029	RA2035	RA2028	RA2032	5412	RA2027	NA
Sampling Date	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010
Compound (ppbV)							
Benzene	0.198	ND	0.0833	ND	ND	ND	ND
Methylene chloride	0.64	ND	0.0499	ND	ND	ND	ND
Toluene	0.311	0.0531	0.221	0.0799	0.0503	0.0582	ND
Vinyl chloride	0.543	ND	ND	ND	ND	ND	ND
Xylene (Total)	< 0.916	< 0.884	< 0.893	< 0.898	< 0.852	< 0.856	< 0.4
Methane (ppmV)	103	22.5	3.46	1.56	2.52	1.62	0.508

ND = Non-Detect

Lee's Lane Landfill - Louisville Kentucky - 6 Year Trend
Wells G-1 through G-5 (Semiannual Sampling)



	9/22/2004	4/18/2005	9/30/2005	4/15/2006	9/15/2006	4/27/2007	11/5/2007	4/17/2008	9/24/2008	4/22/2009	9/25/2009	4/30/2010
G1	161	170,000	57,900	13,700	64400	86,900	7,150	24.5	699	4.19	3.53	103
G2	12.4	5.1	12.5	2.93	4.17	52.10	2.48	1.41	2.90	1.51	11.4	22.5
G3	13.5	7.5	12.9	5.72	5.55	6.85	2.54	2.09	1.41	2.18	1.75	3.46
G4	13.8	1130.0	15.9	1.84	3.28	1.54	2.62	2.18	1.26	4.22	4.02	1.56
G5-L	12.3	5.8	16.3	6.61	6.64	5.30	3.73	3.41	3.36	3.88	1.74	2.52
G5-R	11.8	5.4		5.91	6.76	3.77	2.42	2.59	1.87	2.7	1.35	1.62